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NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER PATEL, ASHOKKUMAR B	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

### Office Action Summary

**Application No.**

10/525,471

**Applicant(s)**

GENTRIC ET AL.

**Examiner**

ASHOK B. PATEL

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1019 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-19 are subject to examination.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recite "the set of streams including at least one stream that is not part of the subset of streams" which Examiner was not able to locate in the specification. Please advice.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant Admitted Prior Art: BACKGROUND OF THE INVENTION) in view of Arye et al. (hereinafter Arye) (US 7, 003, 794 B2) and further in view of Network Working Group Internet-Draft (A. Narasimhan and J. Sergent, Dated February 22, 2002) (hereinafter Narasimhan).

**Referring to claim 1,**

AAPA teaches method of streaming multimedia data from a server to a client over a network having a variable bandwidth, the multimedia data represented by a set of streams having various predetermined bit rates, with a subset of streams of the set of streams having bit rates compatible with a measured bandwidth of the network, the set of streams including at least one stream that is not part of the subset of streams (page 1 and 2 of AAPA, "Based on the bit rates of the various streams and on the available bandwidth, the server selects a stream having a bit rate compatible with the available bandwidth. The server can also select a subset of streams, when the client is intended to decode simultaneously many streams, e.g. an audio and a video stream. In the following, a "subset of streams" shall designate one stream or a few streams.)

AAPA does not teach, the method being further characterised in that it comprises the steps of :

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responsive to descriptions of each stream of the set of streams, configuring the client so that the client can decode all the streams within the set of streams;

“muting all the streams within the set of streams, except the subset of streams, and decoding the subset of streams by the client”,

Arye teaches the method being further characterised in that it comprises the steps of :

responsive to descriptions of each stream of the set of streams, configuring the client so that the client can decode all the streams within the set of streams (col. 10, line 26-28, “The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates, announced over known protocol such as

SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure.” **NOTE:** In a bi-directional network, a Session Description Protocol (SDP) can be transmitted by a real-Time Streaming Protocol (RTSP). The SDP is used to describe multimedia sessions for the purpose of session announcements, session invitations, and opening of other sessions.

**NOTE:** A multimedia encoder can capture real-time audio and video data and represent the captured data as multiple streams. For example, audio is typically represented as one stream and video as another. Complex files can have multiple streams, some of which may be mutually exclusive. RTSP specifies a mechanism by which a client can ask a server to deliver one or more of the encoded media streams. RTSP also provides a way for the client to obtain information about the contents of the multimedia presentation via SDP message

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format prior to delivery of the multimedia. SDP enumerates the available media streams and lists a limited set of auxiliary information ("SDP metadata") that is associated with the collection of streams."),

playing all the streams within the set of streams (col. 10, line 26-28, "The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates, announced over known protocol such as SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure.". Fig. 4, "Look up Table 1. In one embodiment, FIG. 4 illustrates the synchronizing database 76 comprising N multimedia content entries 82, 84, . . . 86; and N corresponding look-up table entries 92, 94, . . . 96.

Look-up table #1 78, as shown in FIG. 4, further includes a number of additional entries: a k number of secondary\_bit\_rate secondary multimedia sub-streams 100, 102, . . . 104. For each secondary\_bit\_rate secondary multimedia sub-streams, the look-up table also includes a lower\_error\_rate threshold 106, 108, . . . , 110; a higher\_error\_rate threshold 112, 114, . . . , 116, and a set of synchronizing data 118, 120, . . . , 122.)

To provide the **Server of AAPA with the Content Switch and Band width Scaler**" (Fig. 1, elements 20 and 21 of Arye) would have been obvious to one of ordinary skill in the art, in view of the teachings of **Arye**, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (i.e. **AAPA's Server with ability of** "Based on the bit rates of the various streams and on the available bandwidth, the server selects a stream having a bit rate compatible with

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the available bandwidth. The server can also select a subset of streams, when the client is intended to decode simultaneously many streams, e.g. an audio and a video stream. In the following, a "subset of streams" shall designate one stream or a few streams." and Arye's Content Switch and Bandwidth Scaler to scale one primary bandwidth to several secondary\_bit\_rate substreams ) with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, i.e., one skilled in the art would have recognized that the Content Switch and Bandwidth Scaler used in Arye would allow the **Sever of AAPA not requiring the "srteam switching at all as indicated in AAPA, page 2**, "Thus, when a server switches from one subset of streams to another one, e.g. in order to adapt the bit rate of the delivered subset of streams to the available bandwidth of the network, a new decoder configuration corresponding to the new delivered subset of streams has to be sent to the client decoder. The decoder is then reinitialised with the new decoder configuration. The stream switching is therefore not seamless for the client and may impact the service quality from the end user's point of view."

AAPA and Arye do not teach "muting all the streams within the set of streams, except the subset of streams, and decoding the subset of streams by the client",

Narasimhan teaches "muting all the streams within the set of streams, except the subset of streams, and decoding the subset of streams by the client", which is not specifically taught by AAPA and Arye, at page 5 of 8, **"The client**

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**may use the option tag "mute" in the Require header on a SETUP request. This may be useful if the client intends to use MUTE to switch between one or more streams with different representations of the same data."**

To provide the combined system of **AAPA** and **Arye** as described above with **client using the option tag "mute" in the Require header on a SETUP request** , would have been obvious to one of ordinary skill in the art, in view of the teachings of Narasimhan, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods (i.e. **client using the option tag "mute" in the Require header on a SETUP request so that the client intends to use MUTE to switch between one or more streams with different representations of the same data"**) would allow the **complete removal of Switching of subset of stream on AAPA's Server side as well as Arye's client side" , because, as AAPA states** "Thus, when a server switches from one subset of streams to another one, e.g. in order to adapt the bit rate of the delivered subset of streams to the available bandwidth of the network, a new decoder configuration corresponding to the new delivered subset of streams has to be sent to the client decoder. The decoder is then reinitialised with the new decoder configuration. The stream switching is therefore not seamless for the client and may impact the service quality from the end user's point of view.", and client is provided with the selection as desired rather than automated switching of the substreams.

**Referring to claim 2,**



Narasimhan teaches a method of streaming multimedia data according to claim 1, wherein the step of muting all the streams except the subset of streams is performed by the server on a request from the client in accordance with the MUTE/UNMUTE extension of the Real Time Streaming Protocol.(page 5 of 8, "The client may use the option tag "mute" in the Require header on a SETUP request. This may be useful if the client intends to use MUTE to switch between one or more streams with different representations of the same data.")

**Referring to claim 3,**

Claim 3 is a claim to a server for implementing the method of claim 1. Therefore claim 3 is rejected for the reasons set forth for claim 1.

**Referring to claim 4,**

AAPA teaches a server as claimed in claim 3, wherein the means for selecting the subset of streams comprise means for measuring the network bandwidth. (page 1 and 2 of AAPA, "Based on the bit rates of the various streams and on the available bandwidth, the server selects a stream having a bit rate compatible with the available bandwidth. The server can also select a subset of streams, when the client is intended to decode simultaneously many streams, e.g. an audio and a video stream. In the following, a "subset of streams" shall designate one stream or a few streams.)

**Referring to claim 5,**

Narasimhan teaches a server as claimed in claim 3, wherein the means for selecting the subset of streams are controlled by a request from the client that identifies the subset of streams, the request from the client being in accordance

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with the MUTE/UNMUTE extension of the Real Time Streaming Protocol. (page 5 of 8, "The client may use the option tag "mute" in the Require header on a SETUP request. This may be useful if the client intends to use MUTE to switch between one or more streams with different representations of the same data.")

**Referring to claim 6,**

Claim 6 is a claim to a client that decodes a subset of streams in accordance with the method of claim 1. Therefore claim 6 is rejected for the reasons set forth for claim 1.

**Referring to claim 7,**

Claim 7 is a claim to a telecommunication system comprising a server for serving a client with a subset of streams in accordance with the method of claim 1. Therefore claim 7 is rejected for the reasons set forth for claim 1.

**Referring to claim 8,**

Claim 8 is a claim to computer- or processor-readable program on a medium, comprising storing a set of instructions which, when loaded-into executed by a processor or a computer, causes the processor or the computer to carry out the method as claimed in claim 1. Therefore claim 8 is rejected for the reasons set forth for claim 1.

**Referring to claim 9,**

Arye teaches a method of streaming multimedia data according to claim 1, wherein the step of configuring the client so that the client can decode all the streams within the set of streams includes the server sending the descriptions of the set of streams to the client responsive to a request from the client to the

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server in accordance with the DESCRIBE command of the Real Time Streaming Protocol. (col. 10, line 26-28, "The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates, announced over known protocol such as SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure." **NOTE:** In a bi-directional network, a Session Description Protocol (SDP) can be transmitted by a real-Time Streaming Protocol (RTSP). The SDP is used to describe multimedia sessions for the purpose of session announcements, session invitations, and opening of other sessions. **NOTE:** A multimedia encoder can capture real-time audio and video data and represent the captured data as multiple streams. For example, audio is typically represented as one stream and video as another. Complex files can have multiple streams, some of which may be mutually exclusive. RTSP specifies a mechanism by which a client can ask a server to deliver one or more of the encoded media streams. RTSP also provides a way for the client to obtain information about the contents of the multimedia presentation via SDP message format prior to delivery of the multimedia. SDP enumerates the available media streams and lists a limited set of auxiliary information ("SDP metadata") that is associated with the collection of streams."),

**Referring to claim 10,**

Arye teaches method of streaming multimedia data according to claim 1, wherein the client includes a plurality of decoders each of which is configured to decode one of the streams of the set of streams (col. 10, line 26-28, "The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates,

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announced over known protocol such as SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure.” )

**Referring to claim 11,**

AAPA, Arye and Narasimhan teaches “a method of streaming multimedia data according to claim 1, further comprising, responsive to a change in the measured bandwidth of the network, selecting a second subset of streams of the set of streams that have rates compatible with the measured bandwidth of the network, muting all the streams within the set of streams except the second subset of streams, and decoding the second subset of streams by the client, wherein switching from decoding the subset of streams to decoding the second subset of streams does not require reconfiguration of the client.”, as explained in claim 1. This claim essentially repeats the steps of claim 1.

**Referring to claim 12,**

Arye teaches a method of streaming multimedia data according to claim 1, wherein the client measures the bandwidth of the network, selects the subset of streams compatible with the measured bandwidth (col. 10, line 16-23), and requests that the server mute all the streams of the set of streams except the subset of streams, the request from the client to the server being in accordance with the MUTE/UNMUTE extension of the Real Time Streaming Protocol (Narasimhan. page 5 of 8)

**Referring to claim 13,**

Arye teaches a server as claimed in claim 3, wherein the server provides the descriptions of all the streams of the set of streams to the client responsive to

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a request from the client in accordance with the DESCRIBE command of the Real Time Streaming Protocol. (col. 10, line 24-28, **NOTE:** In a bi-directional network, a Session Description Protocol (SDP) can be transmitted by a real-Time Streaming Protocol (RTSP). The SDP is used to describe multimedia sessions for the purpose of session announcements, session invitations, and opening of other sessions. **NOTE:** A multimedia encoder can capture real-time audio and video data and represent the captured data as multiple streams. For example, audio is typically represented as one stream and video as another. Complex files can have multiple streams, some of which may be mutually exclusive. RTSP specifies a mechanism by which a client can ask a server to deliver one or more of the encoded media streams. RTSP also provides a way for the client to obtain information about the contents of the multimedia presentation via SDP message format prior to delivery of the multimedia. SDP enumerates the available media streams and lists a limited set of auxiliary information ("SDP metadata") that is associated with the collection of streams."),

**Referring to claim 14,**

Arye teaches a client as claimed in claim 6, further comprising a plurality of decoders each of which is configured by the means for configuring to decode one of the streams of the set of streams (col. 10, line 26-28, "The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates, announced over known protocol such as SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure." )

**. Referring to claim 15,**

Arye teaches a client as claimed in claim 14, wherein the plurality of decoders are configured responsive to descriptions of all the streams of the set of streams being provided to the client by a server, the descriptions being provided in response to a request by the client in accordance with the DESCRIBE command of the Real Time Streaming Protocol (col. 10, line 24-28, **NOTE:** In a bi-directional network, a Session Description Protocol (SDP) can be transmitted by a real-Time Streaming Protocol (RTSP). The SDP is used to describe multimedia sessions for the purpose of session announcements, session invitations, and opening of other sessions. **NOTE:** A multimedia encoder can capture real-time audio and video data and represent the captured data as multiple streams. For example, audio is typically represented as one stream and video as another. Complex files can have multiple streams, some of which may be mutually exclusive. RTSP specifies a mechanism by which a client can ask a server to deliver one or more of the encoded media streams. RTSP also provides a way for the client to obtain information about the contents of the multimedia presentation via SDP message format prior to delivery of the multimedia. SDP enumerates the available media streams and lists a limited set of auxiliary information ("SDP metadata") that is associated with the collection of streams."),

**Referring to claim 16,**

Narasimhan. teaches a telecommunication system as claimed in claim 7, wherein the client sends a request in accordance with the MUTE/UNMUTE extension of the Real Time Streaming Protocol to the server to request that the

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server mute all the streams within the set of streams except the subset of streams. (Narasimhan. page 5 of 8)

**Referring to claim 17,**

Arye teaches a telecommunication system as claimed in claim 7, wherein the client further includes a plurality of decoders each of which is configured by the means for configuring to decode one of the streams of the set of streams (col. 10, line 26-28, "The primary multimedia stream is scaled to lower bit-rate streams at multiple bit-rates, announced over known protocol such as SDP. The multiple secondary sub-streams are preferably synchronized and identical in their structure." )

**Referring to claim 18,**

Arye teaches a telecommunication system as claimed in claim 17, wherein the plurality of decoders are configured responsive to descriptions of all the streams of the set of streams being provided to the client by the server, the descriptions being provided in response to a request by the client in accordance with the DESCRIBE command of the Real Time Streaming Protocol (col. 10, line 24-28, **NOTE:** In a bi-directional network, a Session Description Protocol (SDP) can be transmitted by a real-Time Streaming Protocol (RTSP). The SDP is used to describe multimedia sessions for the purpose of session announcements, session invitations, and opening of other sessions. **NOTE:** A multimedia encoder can capture real-time audio and video data and represent the captured data as multiple streams. For example, audio is typically represented as one stream and video as another. Complex files can have multiple streams, some of which may

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be mutually exclusive. RTSP specifies a mechanism by which a client can ask a server to deliver one or more of the encoded media streams. RTSP also provides a way for the client to obtain information about the contents of the multimedia presentation via SDP message format prior to delivery of the multimedia. SDP enumerates the available media streams and lists a limited set of auxiliary information ("SDP metadata") that is associated with the collection of streams."),

**Referring to claim 19,**

Arye teaches a telecommunication system as claimed in claim 7, wherein the client measures the bandwidth of the network, selects the subset of streams compatible with the measured bandwidth (col. 10, line 16-23),, and requests that the server mute all the streams of the set of streams except the subset of streams, the request from the client to the server being in accordance with the MUTE/UNMUTE extension of the Real Time Streaming Protocol. (Narasimhan. page 5 of 8).

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially



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teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHOK B. PATEL whose telephone number is (571)272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashok B. Patel/

Primary Examiner, Art Unit 2456